

Claims

Please amend the claims as follows, where underlines stand for additions and strikethroughs stand for deletions.

1. (Currently Amended) Process for improving energy supply when heating and melting a scrap bulk, wherein preheated oxidizing gas with addition of fossil fuels melts a channel into the scrap bulk, and further energy supply occurs through this channel and wherein hot blast is supplied to the scrap bulk ~~from the top~~ from a top position.
2. (Previously presented) The process as claimed in claim 1, wherein hot blast supply occurs centrally from the top.
3. (Previously presented) The process as claimed in claim 1, wherein the hot blast is divided into several separate jets.
4. (Previously presented) The process as claimed in claim 1, wherein the hot blast is distributed to a central jet with 35 to 65 % of the total amount and several jets outside the central jet for the rest.
5. (Previously presented) The process as claimed in claim 1, wherein hot blast is supplied via a vertically adjustable lance.
6. (Previously presented) The process as claimed in claim 5, wherein the hot blast lance rotates around the vertical axis.
7. (Previously presented) The process as claimed in claim 1, wherein a hot heel remains in the furnace.
8. (Previously presented) The process as claimed in claim 7, wherein the hot heel in the furnace makes up 10 to 30 % of the melt.

9. (Previously presented) The process as claimed in claim 1, wherein oxygen is injected via bottom blowing tuyeres.
10. (Previously presented) The process as claimed in claim 9, wherein the bottom blowing tuyeres are installed in an indentation of the furnace bottom.
11. (Previously presented) The process as claimed in claim 1, wherein a high hot blast velocity 500 to 900 m/sec is applied during a first phase and a reduced hot blast velocity approx. 300 to 500 m/sec during a second phase.
12. (Previously presented) The process as claimed in claim 11, wherein the hot blast jet is enriched with oxygen to 30 to 50 % in phase 1, whereas there is no or hardly any oxygen enrichment in phase 2.
13. (Previously presented) The process as claimed in claim 11, wherein the distance of the hot blast jet to the surface of the scrap is 0.2 to 0.5 m in phase 1 and is adjusted to a distance to the iron bath of at least 3 m during phase 2.